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**Volume 2
Sauget Area 2
Data Tables/Maps**

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 5
Office of Superfund
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SITE NARRATIVE

SITE Q

SITE NARRATIVE - SAUGET AREA 2 / Site Q

Sample Locations	Sampling Entity	Date Sampled	Data Source
X101 - X111	IEPA	11/9 to 11/10/94	Memo to M. Rebbe (IDPH) from P. Takacs (IEPA) dated 12/30/94 Re: November Sampling with maps and data
QD1 - QD3	E & E	5/27/94	Removal Action Report for Sauget Area 2: Site Q prepared by Ecology and Environment 7/29/94
Pit #1, Pit #2	Riedel	9/89	Ltr. to Carol Ropski (EPA) from R. Burke (Eagle Marine) dated 1/19/95 Re: Response of Eagle Marine Industries to Information Request
B-1, through B-18	E & E	7/93	"Description of Current Situation at the Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., July 1986
L-1, P-1	IEPA	10/17/72	"Description of Current Situation at the Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., July 1986
P-2	IEPA	4/10/73	"Description of Current Situation at the Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., July 1986
L-1, L-2	IEPA	10/28/81	"Description of Current Situation at the Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., July 1986
L101 - L103	IEPA	9/29/83	"Description of Current Situation at the Dead Creek Project Sites" prepared for IEPA by Ecology and Environment, Inc., July 1986
Q201 - Q208	USEPA	1997	Preliminary Ecological Risk Assessment for Sauget Area 2: Site Q prepared by USEPA 1997

SITE NARRATIVE - SAUGET AREA 2 / Site Q

Nature and Extent of Contamination:

Southern Portion of Site Q (samples X101-X111 and Q203-Q208):

VOC concentrations in soils ranged from 0.008 to 0.29 mg/kg for 5 of the 11 samples analyzed for these parameters. BNA concentrations ranged from 0.38 to 1.9 mg/kg for 5 of the 11 samples collected. Pesticides were not detected in any of the 11 samples analyzed for these parameters. PCB concentrations ranged from 0.06 to 223 mg/kg for 14 of 17 samples collected.

The samples collected from the southern portion of Site Q are collected from depressional areas. These depressional areas have been identified by IEPA as apparent disposal areas and not all of the property south of the Alton & Southern Railroad has been sampled or characterized. The extent of surficial contamination in the southern portion of Site Q (south of the Alton & Southern Railroad) is fairly well defined laterally. However, there are no subsurface soils to help delineate the extent of vertical contamination.

Northern Portion of Site Q (all samples north of the Alton & Southern Railroad):

Waste samples (QD1 to QD3) collected in drums adjacent to the river at Site Q revealed a BNA concentration of 534 mg/kg in one sample, and PCB concentrations ranged from 180,000 to 260,000 mg/kg for the drum samples collected.

Surface water samples (P1 and P2) collected on Site Q did not contain appreciably high concentrations of metals. These samples were not analyzed for organic parameters. Pond sediments (Q201 and Q202) collected in the center of Site Q had PCB concentrations which ranged from 1.8 to 4.6 mg/kg for the two samples.

BNA concentrations in leachate samples (from samples L-1, L-2, L101, L102, and L103) were 5 µg/L for 2 of the 5 samples collected. The leachate samples were not analyzed for VOCs, and pesticides were not detected in any of the 5 samples. PCB concentrations ranged from 0.1 to 1.0 µg/L for 4 of the 5 samples collected. Metals, particularly As, Cr, Cu, Pb, and Zn, were elevated in a few of these samples.

VOC concentrations in the subsurface soils (from borings B-1 to B-18 and Pits 1 & 2) ranged from 0.02 to 5,855 mg/kg for 28 of the 36 samples collected. BNA concentrations ranged from 3.8 to 15,190 mg/kg for 34 of the 36 samples collected. Pesticide concentrations were 0.1 and 3.3 mg/kg for 2 of the 35 samples collected. PCB concentrations ranged from 0.002 to 16,000 mg/kg for 32 of the 36 samples collected. Dioxin (2,3,7,8-TCDD) concentrations in subsurface soil samples ranged from 0.0001 to 0.0033 mg/kg in two of the 35 samples analyzed for this parameter.

The extent of contamination in the southern portion of Site Q (south of the Alton & Southern Railroad) is fairly well defined laterally in and around the depressional areas identified by IEPA. However, there are no subsurface soils to help delineate the extent of vertical contamination. The extent of contamination in the central portion of Site Q is poorly defined. Wastes have been initially identified through sampling of drum samples and leachate but surface and subsurface soil samples are lacking in this area. The extent of contamination in the northern portion of Site Q, adjacent to Site R is well defined through multiple soil borings and subsurface soil samples.

Containment and Integrity (if known):

There is no known containment for site Q. Wastes are present at the surface in the southern portion of Site Q. The northern portion is covered primarily with cinders. Access to this site is unrestricted.

Other Comments: See the attached "Site Description" for more site details.

SITE DESCRIPTION - Sauget Area 2/Site Q

Site Q is an inactive waste disposal facility in Sauget and Cahokia. The facility, which was operated by Sauget & Company between 1966 and 1973, covers approximately 90 acres. The site is located on the east bank of the Mississippi River and is on the river side of the flood control levee. Most of Site Q is occupied by the Pillsbury Company, which operates a coal and grain unloading and transfer facility. The northern half of the site contains coal and cinders while the southern portion is unoccupied. A railroad spur divides the site and several ponds exist on site. Site Q was operated without a permit. The north side was registered with the IDPH in 1967, prior to formation of IEPA. The site is presently covered with black cinders which makes it highly permeable. Site Q is presently being leased to the Pillsbury Co. by its owners the Riverport Terminal and Fleeting Co.

The following is a chronology of events for site Q as discovered in the file information search:

1966

Disposal operations began in the northern most portion of site Q. A flyash pond operated by Union Electric existed at the area immediately south of the Monsanto Chemical dump (Site R).

1968 - 1972

Septic tank pumping and general municipal refuse were accepted at the site.

Early 1970s

IEPA inspections documented several violations of the Illinois Environmental Protection Act, including open burning, using unsuitable cover materials (cinders and flyash), and disposal of liquid chemical wastes.

April 1971

IEPA filed a complaint against Sauget & Co.. The company was ordered to cease open burning, using flyash and cinders for cover materials, and accepting liquid chemical wastes.

May 1971

The Illinois Pollution Control Board issued an order to Sauget & Company to discontinue the use of cinders and flyash for final cover.

September 1971 - August 1971

IEPA conducted monthly inspections at the site. During this time they cited inadequate daily and final cover, and the disposal of liquid wastes.

July 1972

An IEPA inspection revealed a smoldering underground fire.

August 1972

Leach tests of the cinder cover was performed by IEPA. The material was found to be inadequate in terms of permeability of material and its high metal content.

October 1972

The fire which began in July 1972, finally went out. The fire smouldered continuously from July to October despite repeated attempts to extinguish it.

1972

Sauget & Company applied for a permit to extend the existing landfill to an area south of the Alton & Southern Railroad. IEPA denied all permit applications to the southern site extension. Approval was never issued by IEPA, however Sauget & Company used this area for disposal.

October 1972

IEPA collected two soil samples from Site Q. One was from ponded water, the other was a leachate sample. Results indicated the presence of metals including lead and mercury.

January 1973

Groundwater samples were collected from two monitoring wells.

March 1973

Mississippi River flood waters inundated Site Q. The flood conditions lasted until May 1973.

April 1973

Samples of ponded water collected by IEPA on two separate occasions.

November 1973

The Illinois Secretary of State revoked the authority of Sauget & Co. to transact business in the State of Illinois.

January 1975

Disposal activities were completed at Site Q by this time.

September 1976

An IEPA inspection of Site Q revealed an underground fire at the site. The fire smoldered for approximately 1 month.

May 1977

The Illinois Pollution Control Board filed suit #77-84 against Sauget & Co. and Paul Sauget. A monetary penalty was invoked and Sauget & Co. was ordered to put a two foot layer of suitable cover material to cap the entire site by February 1981.

May 1980

IEPA was notified that drums and chemical wastes were uncovered during excavation along a railroad spur.

May 1981

In response to Sauget's failure to comply with order #77-84 and alleging several violations of the Illinois Environmental Protection Act, the Illinois Attorney General filed suit against Sauget & Co.

October 1981

IEPA sampled leachate seeps from the banks of the river. Results indicated high levels of organic contaminants.

June 1983

A subsurface investigation at Site Q was initiated by a USEPA FIT Contractor. Over half of the organics analyzed for in the samples were detected including 2,3,7,8-TCDD in two samples. A geophysical investigation was completed by Technos of Miami, Florida.

September 1983

IEPA took more leachate seep samples from the bank of the river. The results were similar to the results in October 1981.

March 1985

The Illinois Attorney General's office reentered a suit against Sauget & Company. The IAG's office ordered final cover to be applied at the site and also requested a civil penalty.

March 1987

E & E took nine samples from eight monitoring wells at site Q. Monitoring wells were also sampled in area adjacent to site Q.

Subsequent to 1987, several investigative and significant environmental events have taken place. In 1992, Monsanto conducted sampling at the south end of Site R, on the Site Q property. In 1994, most of site Q was inundated by the Mississippi River flood waters. IEPA and USEPA conducted sampling in the depressional areas at the southern portion of Site Q in 1994 and 1997, respectively. In addition to sampling activities, construction of offices and storage areas for a landscaping firm has taken place in the northern and central portions of Site Q.

(Note: All information above was excerpted from a document with the heading of "Background" which was taken off microfiche from the IEPA file records)

**SAUGET Analytical Data
Site Q**

**SURFACE SOIL SAMPLES
Volatile Organic Compounds (µg/kg)
Collected by IEPA (11/9-10/94)**

Sample Number	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110
VOC										
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	15	8 J	ND	ND	5 J	ND	ND	8 J	ND	12 J
Acetone	ND	ND	ND	ND	27	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	24	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene (total)	240	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	10 J	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	10 J	ND	ND	ND	ND	18	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	5 J	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	8 J	ND	ND	ND	14	ND	ND	ND	ND	8 J
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	ND	14	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram.

J - Estimated value

ND - Not detected

SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Volatile Organic Compounds ($\mu\text{g/kg}$)
Collected by IEPA (11/9-11/10/1994)

	Sample Number	X111	Maximum Detected
VOC			
Chloromethane		ND	ND
Bromomethane		ND	ND
Vinyl chloride		ND	ND
Chloroethane		ND	ND
Methylene chloride		ND	18
Acetone		ND	27
Carbon Disulfide		ND	ND
1,1-Dichloroethene		ND	ND
1,1-Dichloroethane		ND	24
1,2-Dichloroethene (total)		ND	240
Chloroform		ND	10 J
1,2-Dichloroethane		ND	ND
2-Butanone		ND	ND
1,1,1-Trichloroethane		ND	18
Carbon Tetrachloride		ND	ND
Vinyl Acetate		ND	ND
Bromodichloromethane		ND	ND
1,2-Dichloropropane		ND	ND
trans-1,3-Dichloropropene		ND	ND
Trichloroethene		ND	6 J
Dibromochloromethane		ND	ND
1,1,2-Trichloroethane		ND	ND
Benzene		ND	5 J
cis-1,3-Dichloropropene		ND	ND
2-Chloroethyl Vinyl Ether		ND	ND
Bromoform		ND	ND
4-Methyl-2-pentanone		ND	ND
2-Hexanone		ND	ND
Tetrachloroethene		ND	5 J
1,1,2,2-Tetrachloroethane		ND	ND
Toluene		ND	14
Chlorobenzene		ND	ND
Ethylbenzene		ND	ND
Styrene		ND	ND
Total Xylenes		ND	14

$\mu\text{g/kg}$ - Micrograms per kilogram.

J - Estimated value.

ND - Not detected.

SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Base Neutrals/Acids (µg/kg)
Collected by IEPA (11/9-10/94)

Sample Number	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110
BNAs										
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND	270 J	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND	ND	280 J	ND	ND	ND
N-Nitroso-n-Dipropylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND	210 J	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	270 J	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis-(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	180 J	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl Phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram.

B - Compound detected in blank sample.

J - Estimated value.

ND - Not detected.

SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Base Neutrals/Acids (µg/kg)
Collected by IEPA (11/9-10/94)

Sample Number	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110
BNAa										
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-Phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	76 J	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND	ND	340 J	310 J	380 J
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	160 J	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	170 J	ND
Butyl Benzyl phthalate	ND	ND	ND	ND	ND	ND	120 J	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	89 J	ND
bis(2-ethylhexyl)phthalate	1200000 B	13000 B	9300 B	110000000 B	13000 B	120000 B	1900 B	3800 B	310 JB	1000 B
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	110 J	ND
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	87 J	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	96 J	ND
Benzo (a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	84 J	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram.

B - Compound detected in blank sample.

J - Estimated value.

ND - Not detected.

SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Base Neutrals/Acids (µg/kg)
Collected by IEPA (11/9-10/94)

Sample Number	X111	Maximum Detected
BNA's		
Phenol	ND	ND
bis(2-Chloroethyl)ether	ND	ND
2-Chlorophenol	ND	ND
1,3-Dichlorobenzene	ND	ND
1,4-Dichlorobenzene	ND	ND
Benzyl Alcohol	ND	ND
1,2-Dichlorobenzene	ND	ND
2-Methylphenol	ND	270 J
bis(2-Chloroisopropyl)ether	ND	ND
4-Methylphenol	ND	280 J
N-Nitroso-n-Dipropylamine	ND	ND
Hexachloroethane	ND	ND
Nitrobenzene	ND	ND
Isophorone	ND	210 J
2-Nitrophenol	ND	ND
2,4-Dimethylphenol	ND	270 J
Benzoic Acid	ND	ND
bis-(2-Chloroethoxy)methane	ND	ND
2,4-Dichlorophenol	ND	ND
1,2,4-Trichlorophenol	ND	ND
Naphthalene	ND	ND
4-Chloroaniline	ND	ND
Hexachlorobutadiene	ND	160 J
4-Chloro-3-methylphenol	ND	ND
2-Methylnaphthalene	ND	ND
Hexachlorocyclopentadiene	ND	ND
2,4,6-Trichlorophenol	ND	ND
2,4,5-Trichlorophenol	ND	ND
2-Chloronaphthalene	ND	ND
2-Nitroaniline	ND	ND
Dimethyl Phthalate	ND	ND
Acenaphthylene	ND	ND
3-Nitroaniline	ND	ND
Acenaphthene	ND	ND

µg/kg - Micrograms per kilogram.
B - Compound detected in blank sample.
J - Estimated value.
ND - Not detected.

SAUGET Analytical Data
Site Q

SURFACE SOIL SAMPLES
Base Neutrals/Acids (µg/kg)
Collected by IEPA (11/9-10/94)

	Sample Number	X111	Maximum Detected
BNAs			
2,4-Dinitrophenol		ND	ND
4-Nitrophenol		ND	ND
Dibenzofuran		ND	ND
2,4-Dinitrotoluene		ND	ND
2,6-Dinitrotoluene		ND	ND
Diethylphthalate		ND	ND
4-Chlorophenyl-Phenylether		ND	ND
Fluorene		ND	ND
4-Nitroaniline		ND	ND
4,6-Dinitro-2-methylphenol		ND	ND
N-Nitrosodiphenylamine		ND	ND
4-Bromophenyl-phenylether		ND	ND
Hexachlorobenzene		ND	ND
Pentachlorophenol		ND	ND
Phenanthrene		73 J	76 J
Anthracene		62 J	62
Carbazole		ND	ND
Di-n-butyl phthalate		250 J	380 J
Fluoranthene		140 J	160 J
Pyrene		140 J	170 J
Butyl Benzyl phthalate		ND	120 J
3,3'-Dichlorobenzidine		ND	ND
Benzo (a)anthracene		ND	89 J
bis(2-ethylhexyl)phthalate		1500	110000000 B
Chrysene		110 J	110 J
Di-n-octyl phthalate		ND	ND
Benzo(b)fluoranthene		110 J	110 J
Benzo(k)fluoranthene		88 J	96 J
Benzo (a)pyrene		ND	84 J
Indeno(1,2,3-cd)pyrene		ND	ND
Benzo(g,h,i)perylene		ND	ND
Dibenzo(a,h)anthracene		ND	ND

µg/kg - Micrograms per kilogram

B - Compound detected in blank sample

J - Estimated value.

ND - Not detected.

**SAUGET Analytical Data
Site Q**

**SURFACE SOIL SAMPLES
Pesticides/PCBs/Herbicides (µg/kg)
Collected by IEPA (11/9-10/94)**

Sample Number	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110
Pesticides/PCBs										
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Gamma-BHC (Lindane)	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Heptachlor	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Aldrin	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Heptachlor Epoxide	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Dieldrin	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Endrin	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Endrin Ketone	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Chlordane	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Toxaphene	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Aroclor-1016	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Aroclor-1242	ND	ND	ND	ND	ND	ND	ND	DM	DM	DM
Aroclor-1248	ND	ND	500	ND	ND	ND	4800 P	DM	DM	DM
Aroclor-1254	110000 P	1100 P	2300	14000 P	22000	1700 P	11000 E	DM	DM	DM
Aroclor-1260	83000	460	1500	12000	6500 P	2300	8800 PE	DM	DM	DM

µg/kg - Micrograms per kilogram.

DM - Data missing

E - Estimated value. Concentration detected exceeds the calibrated range

P - Greater than 25% difference exists for the detected concentrations between the two GC columns. The lower of the results is reported.

**SAUGET Analytical Data
Site Q**

**SURFACE SOIL SAMPLES
Pesticides/PCBs/Herbicides (µg/kg)
Collected by IEPA (11/9-10/94)**

	Sample Number	X111	Maximum
Pesticides/PCBs			Detected
Alpha-BHC		DM	ND
Beta-BHC		DM	ND
Delta-BHC		DM	ND
Gamma-BHC (Lindane)		DM	ND
Heptachlor		DM	ND
Aldrin		DM	ND
Heptachlor Epoxide		DM	ND
Endosulfan I		DM	ND
Dieldrin		DM	ND
4,4'-DDE		DM	ND
Endrin		DM	ND
Endosulfan II		DM	ND
4,4'-DDD		DM	ND
Endosulfan sulfate		DM	ND
4,4'-DDT		DM	ND
Methoxychlor		DM	ND
Endrin Ketone		DM	ND
Chlordane		DM	ND
Toxaphene		DM	ND
Aroclor-1016		DM	ND
Aroclor-1221		DM	ND
Aroclor-1232		DM	ND
Aroclor-1242		DM	ND
Aroclor-1248		DM	4800 P
Aroclor-1254		DM	110000 P
Aroclor-1260		DM	83000

µg/kg - Micrograms per kilogram.

DM - Data missing.

E - Estimated value. Concentration detected exceeds the calibrated range.

P - Greater than 25% difference exists for the detected concentrations between the two GC columns. The lower of the results is reported.

SAUGET Analytical Data Site Q

SURFACE SOIL SAMPLES Total Metals (mg/kg) Collected by IEPA (11/9-10/94)

Sample Number	X101	X102	X103	X104	X105	X106	X107	X108	X109	X110
Total Metals										
Aluminum	10700 *	5710 *	3240 *	3500 *	237 *	3250 *	5630 *	3330 *	5690 *	1030 *
Antimony	157 N*	ND	17900 N*	ND	ND	ND	ND	ND	ND	47.6 N*
Arsenic	13.7 N*S	1.4 BN*S	216 N*S	1.6 BNW*	0.47 BN*	0.93 BN*	2.7 N*S	3.3 N*S	3 N*S	19.3 N*S
Barium	1220 N*	141 N*	1680 N*	63.3 N*	168 N*	3620 N*	103 N*	150 N*	123 N*	1120 N*
Beryllium	0.54 B	0.49 B	0.3 B	0.31 B	ND	ND	0.44 B	ND	0.47 B	ND
Cadmium	2280 *	3.9 *	8.7	1.1 B*	1.4 *	1.5 *	28.7 *	6 *	1.9 *	1.2 B
Calcium	13400	18000	10300	152000	456 B	1320	4360	2090	9070	413 B
Chromium	3650 *	12.1 *	142 *	5.8 *	3 *	7 *	287 *	43.9 *	10.4 *	40.8
Cobalt	18.7	7.4 B	13.3 B	2.9 B	ND	3.7 B	8.2 B	5.7 B	8 B	6.9 B
Copper	324	18.7	1830	7.6	2.8 B	9	32.8	168	21.6	226
Iron	63500 *	11800 *	80500 *	8450 *	489 *	2170 *	22600 *	7920 *	10900 *	65200 *
Lead	7690	182 *	195000 *	18100 *	62.2 *	41.1	191 *	571 *	52 *	5320 *
Magnesium	2940	4250	1350	4500	56.9 B	2350	2040	1230 B	2830	85.9 B
Manganese	606	372	1270	275	4	62.3	334	133	455	152
Mercury	4.9	ND	0.25	ND	ND	0.14	ND	0.3	ND	0.64
Nickel	153 N*	17.6 N*	101 N*	8.1 BN*	ND	6.5 BN*	23.1 N*	18.7 N*	18.9 N*	371 N*
Potassium	1310 B	1030 B	446 B	604 B	ND	301 B	898 B	598 B	940 B	2430
Selenium	69.9 *S	ND	ND	ND	2.1 B*	ND	1.5 *S	0.33 B*W	ND	ND
Silver	3.3 N	ND	30.2 N	ND	ND	ND	ND	ND	ND	28.9 N
Sodium	268 B	ND	ND	810 B	ND	ND	ND	ND	ND	476 B
Thallium	ND	ND	0.89 B	ND	ND	ND	ND	ND	ND	ND
Vanadium	7.3 B	16	ND	7.6 B	ND	10 B	13.8	9.1 B	13.6 B	ND
Zinc	7290 *	689	9520 *	95 *	10.8 *	66.1 *	2010 *	338 *	206 *	120 *
Cyanide	3.3	ND	2.8	ND	ND	ND	ND	ND	ND	ND
Sulfate	82.4	ND	55.9	ND	907	ND	76.1	170	4780	901
Sulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

mg/kg - Milligrams per kilogram

B - Estimated value The value is less than the CRDL, but greater than the instrument detection limit

N - Laboratory spike recoveries were outside QC protocols

ND - Not detected

S - Analysis performed using the method of standard additions

W - Laboratory post-digestion spike for furnace AA analysis exceeds QC limits

* - Laboratory duplicate analysis not within control limits

**SAUGET Analytical Data
Site Q**

**SURFACE SOIL SAMPLES
Total Metals (mg/kg)
Collected by IEPA (11/9-10/94)**

	Sample Number	X111	Maximum
			Detected
Total Metals			
Aluminum		10100 *	10700 *
Antimony		ND	17900 N*
Arsenic		4.4 BN*S	216 N*S
Barium		170 N*	3620 N*
Beryllium		0.73 B	0.73 B
Boron		1.9 *	2260 *
Cadmium		11500	152000
Chromium		15.6 *	3650 *
Cobalt		9.7 B	18.7
Copper		38	1630
Iron		17100 *	80800 *
Lead		58.1 *	195000 *
Magnesium		3990	4600
Manganese		597	1270
Mercury		ND	4.9
Nickel		25.9 N*	371 N*
Potassium		1520	2430
Selenium		ND	59.9 *S
Silver		ND	30.2 N
Sodium		ND	810 B
Thallium		ND	0.89 B
Vanadium		23.1 B	23.1
Zinc		216 *	9520 *
Cyanide		ND	3.3
Sulfate		300	4780
Sulfide		ND	ND

mg/kg - Milligrams per kilogram.

B - Estimated value. The value is less than the CRDL, but greater than the instrument detection limit.

N - Laboratory spike recoveries were outside QC protocols.

ND - Not detected.

S - Analysis performed using the method of standard additions.

W - Laboratory post-digestion spike for furnace AA analysis exceeds QC limits.

* - Laboratory duplicate analysis not within control limits.

ALTON

Fox Terminal



SAMPLE LOCATION MAP - SAMPLES X101 - X111

Source: Memo to M. Rebbe from P. Takacs, dated 12/30/94

SAUGET Analytical Data
Site Q

SOIL SAMPLES
Semi-Volatiles (µg/kg)
Collected by E&E (5/27/94)

Sample Number	QD1	QD2	QD3	Maximum Concentration
Semi-Volatiles				
Phenol	69000 JD	ND	ND	69000 JD
2-Chlorophenol	67000 JD	ND	ND	67000 JD
1,4-Dichlorobenzene	110000 JD	ND	ND	110000 JD
N-Nitroso-di-n-propylamine	42000 JD	ND	ND	42000 JD
1,2,4-Trichlorobenzene	51000 JD	ND	ND	51000 JD
4-Chloro-3-Methylphenol	67000 JD	ND	ND	67000 JD
Acenaphthene	44000 JD	ND	ND	44000 JD
4-Nitrophenol	24000 JD	ND	ND	24000 JD
2,4-Dinitrotoluene	40000 JD	ND	ND	40000 JD
Pentachlorophenol	20000 JD	ND	ND	20000 JD

µg/kg : Micrograms per kilogram.

D - Compound concentration is at a secondary dilution factor.

J - Estimated value.

ND - Not detected

**SAUGET Analytical Data
Site Q**

**SOIL SAMPLES
TCLP Metals ($\mu\text{g/L}$)
Collected by E&E (5/27/94)**

	Sample Number	QD1	QD2	QD3	Maximum
Total Metals					Concentration
Arsenic		ND	ND	ND	ND
Barium		320	440	390	440
Cadmium		ND	ND	ND	ND
Chromium		ND	ND	ND	ND
Lead		ND	ND	ND	ND
Mercury		ND	ND	ND	ND
Lead		ND	ND	ND	ND
Selenium		ND	ND	ND	ND
Silver		ND	ND	ND	ND

$\mu\text{g/L}$ - Micrograms per liter.

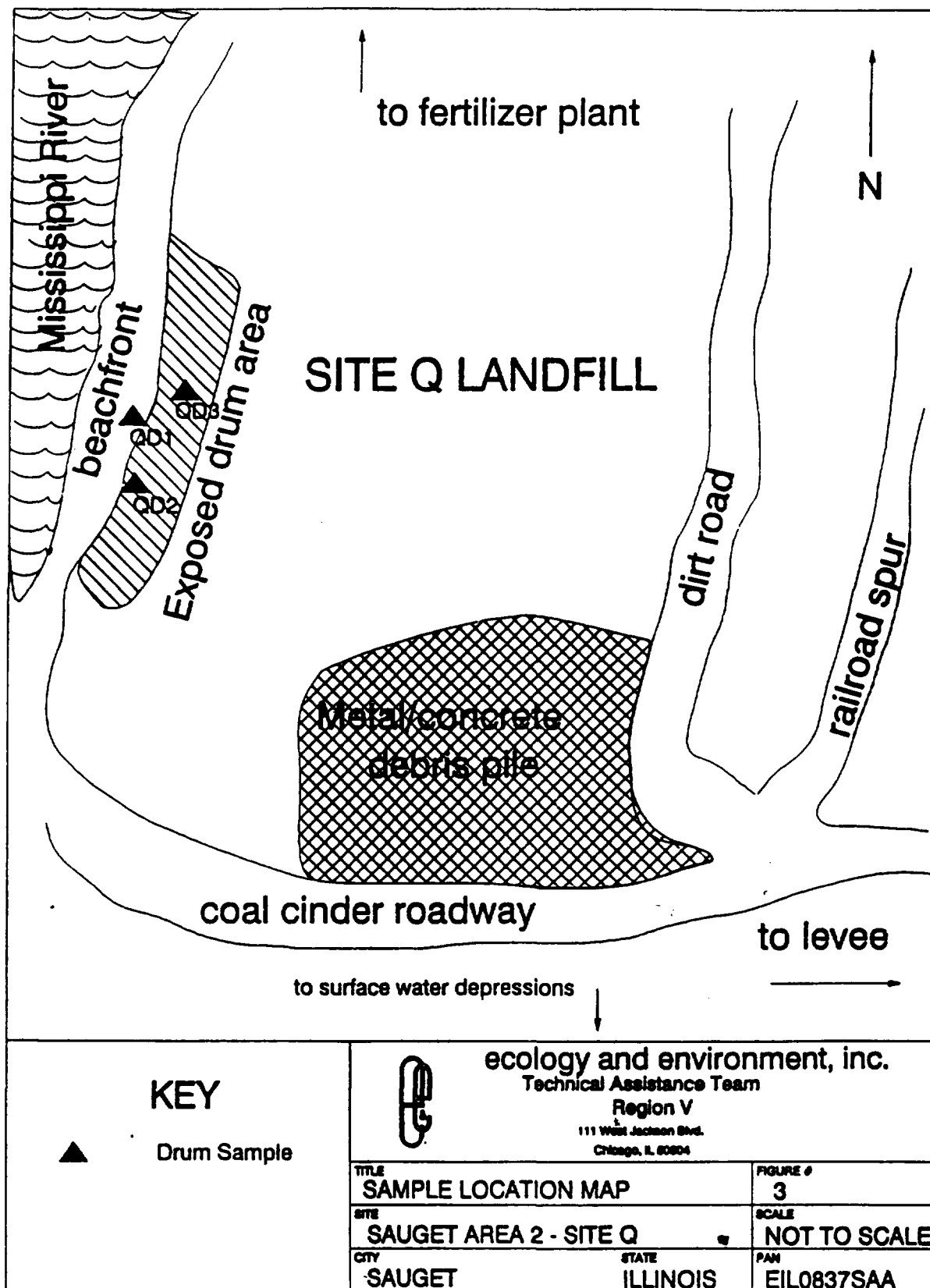
ND - Not detected

SAUGET Analytical Data
Site Q

SOIL SAMPLES
TCLP Semi-Volatiles (µg/L) and PCBs (mg/kg)
Collected by E&E (5/27/94)

Sample Number	QD1	QD2	QD3	Maximum Concentration
TCLP and PCB				
2,4,6-Trichlorophenol	ND	6.3 J	ND	6.3 J
Pentachlorophenol	ND	16 J	ND	16 J
PCB - 1260 (mg/kg)	180000	260000	230000	260000

µg/L - Micrograms per liter.
mg/kg - Milligrams per kilogram.
J - estimated value
PCBs - polychlorinated biphenyls



SAUGET Analytical Data
Site Q

SOIL SAMPLES (Sampling date not known)
Volatile Organic Compounds (µg/kg)
Collected by Riedel Industrial Waste Management, Inc.

recycled paper

ecology and environment

Sample Number	PIT #2	Maximum Concentration
VOC		
Chloromethane	ND	ND
Bromomethane	ND	ND
Vinyl chloride	ND	ND
Chloroethane	ND	ND
Methylene chloride	ND	ND
Carbon Disulfide	ND	ND
1,1-Dichloroethene	ND	ND
1,1-Dichloroethane	ND	ND
1,2-Dichloroethene (total)	ND	ND
Chloroform	69000	69000
1,2-Dichloroethane	ND	ND
2-Butanone	30200	30200
1,1,1-Trichloroethane	ND	ND
Carbon Tetrachloride	ND	ND
Vinyl Acetate	ND	ND
Bromodichloromethane	ND	ND
1,2-Dichloropropane	ND	ND
cis-1,3-Dichloropropene	ND	ND
Trichloroethene	ND	ND
Dibromochloromethane	ND	ND
1,1,2-Trichloroethane	ND	ND
Benzene	ND	ND
trans-1,3-Dichloropropene	ND	ND
Bromoform	ND	ND
4-Methyl-2-pentanone	ND	ND
2-Hexanone	ND	ND
Tetrachloroethene	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND
Toluene	5500	5500
Chlorobenzene	15700	15700
Ethylbenzene	2780	2780
Styrene	ND	ND
Total Xylenes	6300	6300

µg/kg - Micrograms per kilogram
 ND - Not detected

**SAUGET Analytical Data
Site Q**

**SOIL SAMPLES (Sampling date not known)
Base Neutrals/Acids (µg/kg)
Collected by Riedel Industrial Waste Management, Inc.**

Sample Number	PIT #1	Maximum Concentration
BNAs		
Phenol	ND	ND
bis(2-Chloroethyl)ether	ND	ND
2-Chlorophenol	ND	ND
1,3-Dichlorobenzene	ND	ND
1,4-Dichlorobenzene	ND	ND
Benzyl Alcohol	ND	ND
1,2-Dichlorobenzene	ND	ND
2-Methylphenol	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND
4-Methylphenol	ND	ND
N-Nitroso-n-Dipropylamine	ND	ND
Nitrobenzene	ND	ND
Isophorone	ND	ND
2-Nitrophenol	ND	ND
2,4-Dimethylphenol	ND	ND
Benzoic Acid	ND	ND
bis-(2-Chloroethoxy)methane	ND	ND
2,4-Dichlorophenol	ND	ND
1,2,4-Trichlorophenol	ND	ND
Naphthalene	ND	ND
4-Chloroaniline	ND	ND
Hexachlorobutadiene	ND	ND
4-Chloro-3-methylphenol	ND	ND
2-Methylnaphthalene	ND	ND
Hexachlorocyclopentadiene	ND	ND
2,4,6-Trichlorophenol	ND	ND
2,4,5-Trichlorophenol	ND	ND
2-Chloronaphthalene	ND	ND
2-Nitroaniline	ND	ND
Dimethyl Phthalate	ND	ND
Acenaphthylene	ND	ND
3-Nitroaniline	ND	ND
Acenaphthene	ND	ND

µg/kg - Micrograms per kilogram
ND - Not detected

SAUGET Analytical Data
Site Q

SOIL SAMPLES (Sampling date not known)
Base Neutrals/Acids (µg/kg)
Collected by Riedel Industrial Waste Management, Inc.

	Sample Number	PIT #1	Maximum Concentration
BNAs			
2,4-Dinitrophenol		ND	ND
4-Nitrophenol		ND	ND
Dibenzofuran		ND	ND
2,4-Dinitrotoluene		ND	ND
2,6-Dinitrotoluene		ND	ND
Diethylphthalate		ND	ND
4-Chlorophenyl-Phenylether		ND	ND
Fluorene		ND	ND
4-Nitroaniline		ND	ND
4,6-Dinitro-2-methylphenol		ND	ND
N-Nitrosodiphenylamine		ND	ND
4-Bromophenyl-phenylether		ND	ND
Hexachlorobenzene		ND	ND
Pentachlorophenol		ND	ND
Phenanthrene		ND	ND
Anthracene		ND	ND
Di-n-butyl phthalate		ND	ND
Fluoranthene		ND	ND
Pyrene		ND	ND
Butyl Benzyl phthalate		ND	ND
3,3'-Dichlorobenzidine		ND	ND
Benzo (a)anthracene		ND	ND
bis(2-ethylhexyl)phthalate		ND	ND
Chrysene		ND	ND
Di-n-octyl phthalate		ND	ND
Benzo(b)fluoranthene		ND	ND
Benzo(k)fluoranthene		ND	ND
Benzo (a)pyrene		ND	ND
Indeno(1,2,3-cd)pyrene		ND	ND
Benzo(g,h,i)perylene		ND	ND
Dibenzo(a,h)anthracene		ND	ND

µg/kg - Micrograms per kilogram

ND - Not detected

**SAUGET Analytical Data
Site Q**

SOIL SAMPLES (Sampling date not known)

Collected by Riedel Industrial Waste Management, Inc.

Sample Number	PIT #2	Maximum Detected
Test Performed		
EP Extraction	ND	ND
RCRA Metals (mg/kg)		ND
Arsenic	<0.4	ND
Barium	27.8	27.8
Cadmium	<0.5	ND
Chromium	<0.5	ND
Lead	<0.5	ND
Mercury	<0.1	ND
Selenium	<0.2	ND
Silver	<0.5	ND
Ignitability (setflash)	--	--
Corrosivity (pH)	--	--
Cyanide	--	--
Sulfides	--	--
Phenols	--	--
PCB Contamination (mg/kg)	342	342

mg/kg - Milligrams per kilogram

ND - Not detected

SAUGET Analytical Data
Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

recycled paper

ecology and environment

Sample Number	B1A	B1B	B2A	B2B	B3A	B3B	B4A	B4B
Sample Depth(ft)	10 - 11.5	17.5 - 19	13.5 - 15.5	17 - 19	10 - 12	13.5 - 15.5	10 - 12	13.5 - 15.5
Organics								
2, 3, 7, 8-TCDD	ND	ND	ND	ND	ND	ND	ND	3.31
2, 4, 6-trichlorophenol	2500	170000	22000	520	1400	1500	ND	94000
2-chlorophenol	24000	65000	800	ND	1500	LT	57000	360000
2, 4-dichlorophenol	86000	310000	31000	1700	780	4500	ND	370000
2, 4-dimethylphenol	ND	ND	500	ND	ND	ND	ND	72000
4, 6-dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND
pentachlorophenol	ND	86000	5400	LT	ND	11000	ND	100000
phenol	24000	55000	45000	4400	3200	100000	98000	88000
2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4-methylphenol	ND	ND	LT	ND	560	LT	ND	330000
2, 4, 5-trichlorophenol	ND	ND	ND	LT	ND	ND	ND	ND
acenaphthene	ND	ND	1200	2800	ND	ND	ND	ND
1, 2, 4-trichlorobenzene	ND	ND	ND	480	ND	ND	LT	100000
1, 2-dichlorobenzene	LT	ND	LT	ND	ND	LT	ND	20000
1, 4-dichlorobenzene	ND	ND	1800	720	LT	780	LT	66000
fluoranthene	ND	ND	ND	1200	ND	ND	ND	LT
isophorene	ND	ND	ND	ND	ND	ND	ND	ND
naphthalene	ND	ND	11000	8300	ND	ND	ND	LT
nitrobenzene	ND	8800	400	ND	ND	ND	ND	56000
N-nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl)phthalate	ND	ND	ND	LT	ND	ND	ND	82000
butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND
di-n-butyl phthalate	ND	ND	ND	ND	ND	ND	ND	LT
di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND
diethyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND
benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND
benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND
benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
chrysene	ND	ND	ND	ND	ND	ND	ND	ND
anthracene	ND	ND	ND	400	ND	ND	ND	ND
benzo(ghi)perylene	ND	ND	ND	ND	ND	ND	ND	ND
fluorene	ND	ND	800	2000	ND	ND	ND	ND
phenanthrene	ND	ND	1000	2700	ND	ND	ND	LT
dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND
indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND
pyrene	ND	ND	LT	LT	ND	ND	ND	LT
aniline	ND	ND	ND	ND	ND	ND	ND	ND
4-chloroaniline	ND	ND	LT	ND	ND	ND	ND	ND
dibenzofuran	ND	ND	1000	3000	ND	ND	ND	ND
2-methylnaphthalene	ND	ND	2000	2300	ND	ND	ND	ND
3-nitroaniline	ND	ND	4800	ND	ND	ND	ND	ND
benzene	ND	ND	ND	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram

ND - Not Detected

LT - Present, but lower than the detection limit for low hazard analyses

**SAUGET Analytical Data
Site Q**

**SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)**

Sample Number	B1A	B1B	B2A	B2B	B3A	B3B	B4A	B4B
Sample Depth(ft)	10 - 11.5	17.5 - 19	13.5 - 15.5	17 - 19	10 - 12	13.5 - 15.5	10 - 12	13.5 - 15.5
Organics								
chlorobenzene	ND	ND	ND	ND	ND	ND	10000	40000
1,2-dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,2-trans-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
methylene chloride	ND	ND	7.4	3.7	LM	8	ND	ND
tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND
toluene	ND	ND	ND	ND	ND	ND	ND	ND
trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
acetone	ND	ND	960	ND	ND	977	ND	LM
2-butanone	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone	ND	ND	ND	ND	ND	LT	ND	ND
styrene	ND	ND	ND	ND	ND	ND	ND	ND
o-xylene	ND	ND	ND	ND	ND	ND	ND	5100
PCB-1242	ND	ND	ND	2	ND	ND	--	--
PCB-1254	ND	ND	ND	ND	ND	ND	--	--
PCB-1248	1000	ND	ND	ND	ND	ND	--	--
PCB-1260	ND	ND	485.2	ND	69.6	ND	--	--
PCB-1016	ND	ND	2120.6	ND	ND	ND	--	--
Total PCB	NR	NR	NR	NR	NR	NR	68000	1000000

µg/kg - Micrograms per kilogram

ND - Not Detected

LT - Present, but lower than the detection limit for low hazard analyses

LM - Present, but lower than the detection limit for medium hazard analyses

NR - Total PCBs not reported

-- Only PCB Total was reported

SAUGET Analytical Data Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

Sample Number Sample Depth(ft)	B5A 13.5-15.5	B5B 17.0-19.0	B6A 10.0-12.0	B6B 13.5-15.5	B7A 10.0-12.0	B7B 13.5-15.5	B8A 13.5-15.5	B8B 17.5-19.5
Organics								
2, 3, 7, 8-TCDD	ND	ND	ND	ND	ND	ND	ND	0.11
2, 4, 6-trichlorophenol	130000	26030	2700	4800	2700	ND	480000	10000
2-chlorophenol	31000	8400	1800	1600	LT	ND	ND	ND
2, 4-dichlorophenol	660000	260000	17000	15000	8100	ND	1500000	64000
2, 4-dimethylphenol	ND	ND	2000	ND	ND	ND	ND	ND
4, 6-dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND
pentachlorophenol	ND	ND	ND	16000	25000	31000	ND	ND
phenol	140000	250000	45000	11000	1800	ND	ND	ND
2-methylphenol	ND	ND	1400	600	ND	ND	ND	ND
4-methylphenol	ND	36000	7000	1400	ND	ND	ND	ND
2, 4, 5-trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND
1, 2, 4-trichlorobenzene	84000	13000	ND	ND	ND	ND	120000	ND
1, 2-dichlorobenzene	100000	28000	LT	ND	ND	ND	180000	ND
1, 4-dichlorobenzene	ND	ND	3100	800	ND	ND	LT	ND
fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
isophorone	ND	ND	ND	ND	ND	ND	ND	ND
naphthalene	ND	LT	800	LT	ND	ND	380000	LT
nitrobenzene	27000	11000	LT	ND	ND	ND	52000	ND
N-nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	ND
butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND
di-n-butyl phthalate	ND	ND	400	LT	ND	ND	ND	ND
di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND
diethyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND
benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND
benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND
benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
chrysene	ND	ND	ND	ND	ND	ND	ND	ND
anthracene	ND	ND	ND	ND	ND	ND	ND	ND
benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND
fluorene	ND	ND	ND	ND	ND	ND	ND	ND
phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND
dibenz(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND
indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND
pyrene	ND	ND	ND	ND	ND	ND	ND	ND
aniline	ND	ND	ND	ND	ND	ND	ND	ND
4-chloroaniline	ND	ND	9000	ND	ND	ND	ND	ND
dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND
2-methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND
3-nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND
benzene	ND	ND	ND	ND	ND	3.2	LM	ND

recycled paper

ecology and environment

µg/kg - Micrograms per kilogram.
ND - Not Detected
LT - Present, but lower than the detection limit for low hazard analyses
LM - Present, but lower than the detection limit for medium hazard analyses

SAUGET Analytical Data
Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

Sample Number	B5A	B5B	B6A	B6B	B7A	B7B	B8A	B8B
Sample Depth(ft)	13.5-15.5	17.0-19.0	10.0-12.0	13.5-15.5	10.0-12.0	13.5-15.5	13.5-15.5	17.5-19.5
Organics								
chlorobenzene	18000	27000	100000	8.4	ND	4.2	7100	ND
1,2-dichloroethane	ND	ND	12000	3.4	ND	ND	ND	ND
1,1-dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,2-trans-dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	ND	ND	46000	3.8	ND	4.5	ND	ND
methylene chloride	ND	ND	ND	15	86	45	LT	ND
tetrachloroethane	ND	ND	ND	ND	ND	LT	ND	ND
toluene	ND	ND	50000	LT	ND	6.1	ND	ND
trichloroethane	ND	ND	ND	ND	ND	LT	ND	ND
acetone	ND	ND	ND	330	200	2600	ND	LM
2-butanone	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone	ND	ND	ND	LT	LT	LT	ND	ND
styrene	ND	ND	ND	ND	ND	ND	ND	ND
o-xylene	ND	ND	140000	13	LT	22	ND	ND
PCB-1242	170000	ND	ND	ND	ND	ND	1700	2700
PCB-1254	360000	ND	ND	ND	ND	ND	ND	ND
PCB-1248	ND	ND	ND	4700	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND	590	13000	880	1500
PCB-1016	ND	ND	ND	ND	2300	46000	ND	ND
Total PCB	NR	66000	NR	NR	NR	NR	NR	NR

µg/kg - Micrograms per kilogram

ND - Not Detected

LT - Present, but lower than the detection limit for low hazard analyses

NR - Total PCBs not reported

SAUGET Analytical Data Site Q

SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)

Sample Number	B9A	B9B	B10A	B10B	B11A	B11B	B12A	B12B
Sample Depth(ft)	15.0-17.0	17.0-19.0	17.0-19.0	19.0-21.0	17.0-19.0	19.0-21.0	17.0-19.0	19.0-21.0
Organics								
2, 3, 7, 8-TCDD	ND	ND	P	ND	P	P	ND	ND
2, 4, 6-trichlorophenol	LT	600	48000	640	ND	ND	4400	9400
2-chlorophenol	640	1100	1700	LT	ND	ND	1200	520
2, 4-dichlorophenol	7400	9800	170000	9600	3200	20000	8800	4200
2, 4-dimethylphenol	ND	LT	ND	ND	ND	ND	ND	ND
4, 6-dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND
pentachlorophenol	ND	4800	ND	2200	ND	ND	24000	920
phenol	7500	14000	32000	11000	6200	37000	17000	7500
2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4-methylphenol	1400	2300	2700	ND	ND	ND	1000	720
2, 4, 5-trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND
1, 2, 4-trichlorobenzene	ND	ND	11000	ND	ND	ND	520	3600
1, 2-dichlorobenzene	ND	ND	11000	ND	LT	ND	ND	800
1, 4-dichlorobenzene	ND	LT	27000	ND	LT	ND	ND	1000
fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
isophorone	ND	ND	ND	ND	17000	LT	ND	720
naphthalene	ND	ND	6500	ND	72000	35000	LT	640
nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	LT	ND
bis(2-ethylhexyl)phthalate	446	ND	ND	ND	52000	34000	440	ND
butyl benzyl phthalate	ND	ND	ND	ND	LT	ND	ND	ND
di-n-butyl phthalate	ND	1500	LT	ND	23000	LT	ND	ND
di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND
diethyl phthalate	LT	840	ND	ND	ND	ND	ND	ND
benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND
benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND
benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	1000
benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
chrysene	ND	ND	ND	ND	6400	ND	ND	ND
anthracene	ND	ND	ND	ND	ND	ND	ND	ND
benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND
fluorene	ND	ND	ND	ND	ND	ND	ND	ND
phenanthrene	ND	ND	ND	ND	5200	ND	ND	ND
dibenzofluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND
pyrene	ND	ND	ND	ND	5600	ND	ND	ND
aniline	ND	ND	ND	ND	ND	ND	ND	ND
4-chloroaniline	ND	ND	ND	ND	ND	ND	ND	LT
dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND
2-methylnaphthalene	ND	ND	ND	ND	10000	ND	ND	ND
3-nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND
benzene	ND	ND	LM	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram

ND - Not Detected

LT - Present, but lower than the detection limit for low hazard analyses

LM - Present, but lower than the detection limit for medium hazard analyses

P - The sample could not be cleaned up sufficiently to yield TCDD results

SAUGET Analytical Data
Site Q

SOIL SAMPLES
Organics (µg/kg)

Collected by Ecology & Environment, Inc. (7/83)

Sample Number	B9A	B9B	B10A	B10B	B11A	B11B	B12A	B12B
Sample Depth(ft)	15.0-17.0	17.0-19.0	15.0-17.0	17.0-19.0	15.0-17.0	17.0-19.0	15.0-17.0	17.0-19.0
Organics								
chlorobenzene	ND	ND	5200	ND	LM	ND	ND	ND
1,2-dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,2-trans-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
ethylbenzene	ND	ND	6500	ND	220000	ND	ND	ND
methylene chloride	3.3	300	8700	LT	ND	ND	LT	ND
tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND
toluene	ND	ND	130000	ND	1300000	100000	ND	LM
trichloroethane	ND	ND	ND	ND	42000	ND	ND	ND
acetone	210	14000	ND	4400	ND	ND	ND	ND
2-butanone	ND	ND	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone	ND	ND	ND	ND	ND	ND	LT	ND
styrene	ND	ND	ND	ND	ND	ND	ND	ND
o-xylene	ND	ND	30000	ND	650000	70000	ND	LM
PCB-1242	600	ND	NA	ND	ND	ND	ND	ND
PCB-1254	ND	ND	NA	ND	ND	ND	ND	ND
PCB-1248	ND	ND	NA	ND	38000	70000	ND	ND
PCB-1260	1500	1300	NA	120	45000	681000	7000	5000
PCB-1016	ND	ND	NA	78	ND	ND	2200	3900
Total PCB	NR	NR	NR	NR	NR	NR	NR	NR

µg/kg - Micrograms per kilogram

ND - Not Detected

NA - Not Analyzed

LT - Present, but lower than the detection limit for low hazard analyses

NR - Total PCBs not reported

**SAUGET Analytical Data
Site Q**

**SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)**

Sample Number	B13A	B13B	B14A	B14B	B15A	B15B	B16A	B17A
Sample Depth(ft)	17.0-19.0	19.0-21.0	17.0-19.0	19.0-21.0	22.0-24.0	24.0-26.0	22.0-24.0	22.0-24.0
Organics								
2, 3, 7, 8-TCDD	ND	ND	P	P	ND	ND	ND	ND
2, 4, 6-trichlorophenol	20000	4600	ND	ND	800	1900	7700	6400
2-chlorophenol	2500	3800	ND	ND	600	1600	4600	100000
2, 4-dichlorophenol	9400	11000	460000	ND	ND	11000	27000	120000
2, 4-dimethylphenol	ND	LT	ND	ND	ND	ND	680	ND
4, 6-dinitro-2-methylphenol	LT	ND	ND	ND	ND	ND	ND	ND
pentachlorophenol	12000	44000	ND	16000	4200	12000	39000	26000
phenol	8900	15000	ND	ND	8000	13000	16000	50000
2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4-methylphenol	920	1400	ND	16000	ND	1000	1900	9200
2, 4, 5-trichlorophenol	ND	ND	ND	ND	ND	ND	LT	ND
acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND
1, 2, 4-trichlorobenzene	2400	3000	13000000	2000000	ND	ND	ND	ND
1, 2-dichlorobenzene	ND	ND	620000	55000	ND	ND	LT	ND
1, 4-dichlorobenzene	1300	2000	1200000	100000	ND	1600	4100	ND
fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
isophorone	ND	ND	ND	14000	ND	ND	ND	ND
naphthalene	ND	LT	210000	20000	ND	720	2000	ND
nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosodiphenylamine	ND	400	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl)phthalate	ND	ND	1100000	220000	ND	ND	ND	4600
butyl benzyl phthalate	ND	ND	ND	LT	ND	LT	ND	ND
di-n-butyl phthalate	ND	LT	900000	49000	LT	3800	ND	ND
di-n-octyl phthalate	ND	LT	ND	ND	ND	ND	ND	ND
diethyl phthalate	ND	ND	ND	ND	ND	LT	ND	ND
benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND
benzo(a)pyrene	LT	ND	ND	ND	ND	ND	ND	ND
benzo(b)fluoranthene	1300*	ND	ND	ND	ND	ND	ND	ND
benzo(k)fluoranthene	1300*	ND	ND	ND	ND	ND	ND	ND
chrysene	ND	ND	ND	ND	ND	ND	ND	ND
anthracene	ND	ND	ND	ND	ND	ND	ND	ND
benzo(ghi)perylene	880	ND	ND	ND	ND	ND	ND	ND
fluorene	ND	ND	ND	ND	ND	ND	ND	ND
phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND
dibenzo(a,h)anthracene	LT	ND	ND	ND	ND	ND	ND	ND
indeno(1,2,3-cd)pyrene	LT	ND	ND	ND	ND	ND	ND	ND
pyrene	ND	ND	ND	ND	ND	ND	ND	ND
aniline	ND	ND	ND	ND	ND	ND	680	ND
4-chloroaniline	LT	2200	ND	ND	ND	ND	9600	ND
dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND
2-methylnaphthalene	ND	ND	ND	LT	ND	ND	ND	ND
3-nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND
benzene	ND	ND	44000	ND	ND	ND	ND	ND

µg/kg - Micrograms per kilogram

ND - Not Detected

LT - Present, but lower than the detection limit for low hazard analyses

P - The sample could not be cleaned up sufficiently to yield TCDD results

**SAUGET Analytical Data
Site Q**

**SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)**

Sample Number	B13A	B13B	B14A	B14B	B15A	B15B	B16A	B17A
Sample Depth(ft)	17.0-19.0	19.0-21.0	17.0-19.0	19.0-21.0	22.0-24.0	24.0-26.0	22.0-24.0	22.0-24.0
Organics								
chlorobenzene	ND	ND	63000	LM	ND	ND	ND	ND
1,2-dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	ND	ND	19000	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	ND	ND	5700	ND	ND	ND	ND	ND
1,2-trans-dichloroethene	ND	ND	11000	ND	ND	ND	ND	ND
ethylbenzene	ND	ND	790000	330000	ND	LT	ND	ND
methylene chloride	50	13	5800	ND	2.5	23	ND	LM
tetrachloroethane	ND	ND	12000	ND	ND	ND	ND	ND
toluene	ND	ND	2400000	540000	ND	ND	ND	ND
trichloroethane	ND	ND	55000	ND	ND	ND	ND	ND
acetone	90	430	ND	ND	540	1400	ND	ND
2-butanone	ND	ND	LM	ND	ND	ND	ND	ND
4-methyl-2-pentanone	ND	LT	250000	ND	LT	ND	ND	ND
styrene	ND	ND	ND	64000	4.2	5.3	ND	ND
o-xylene	ND	ND	2300000	1400000	ND	LT	ND	ND
PCB-1242	ND	ND	ND	ND	ND	5000	ND	ND
PCB-1254	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260	770	1300	2900000	16000000	190	1000	370	68
PCB-1016	ND	ND	ND	ND	210	ND	ND	ND
Total PCB	NR	NR	NR	NR	NR	NR	NR	NR

µg/kg - Micrograms per kilogram

ND - Not Detected

NA - Not Analyzed

LT - Present, but lower than the detection limit for low hazard analyses

LM - Present, but lower than the detection limit for medium hazard analyses

NR - Total PCBs not reported

**SAUGET Analytical Data
Site Q**

SOIL SAMPLES

Organics (µg/kg)

Collected by Ecology & Environment, Inc. (7/83)

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Sample Number	B17B	B18A	B18B	BLANK 1	BLANK 2	Maximum
Sample Depth(ft)	24 0-26 0	22 0-24 0	24 0-26 0	NA	NA	Concentration
Organics						
2, 3, 7, 8-TCDD	ND	ND	ND	ND	ND	3.31
2, 4, 6-trichlorophenol	ND	ND	ND	ND	ND	ND
2-chlorophenol	ND	ND	ND	ND	ND	ND
2, 4-dichlorophenol	ND	ND	ND	ND	ND	ND
2, 4-dimethylphenol	3800	ND	ND	ND	ND	72000
4, 6-dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND
pentachlorophenol	ND	ND	ND	ND	ND	ND
phenol	ND	ND	ND	ND	ND	ND
2-methylphenol	ND	ND	ND	ND	ND	1400
4-methylphenol	ND	ND	ND	ND	ND	ND
2, 4, 6-trichlorophenol	ND	ND	ND	ND	ND	ND
acenaphthene	ND	ND	ND	ND	ND	2800
1, 2, 4-trichlorobenzene	ND	ND	ND	ND	ND	ND
1, 2-dichlorobenzene	ND	ND	ND	ND	ND	ND
1, 4-dichlorobenzene	550	ND	LT	ND	ND	1200000
fluoranthene	ND	ND	ND	ND	1000	1200
isophorone	ND	ND	ND	ND	ND	17000
naphthalene	ND	ND	ND	ND	ND	ND
nitrobenzene	ND	ND	ND	ND	ND	56000
N-nitrosodiphenylamine	ND	ND	ND	ND	ND	400
bis(2-ethylhexyl)phthalate	580	910	1400	LT	ND	1100000
butyl benzyl phthalate	ND	ND	ND	ND	ND	ND
di-n-butyl phthalate	ND	ND	LT	ND	ND	900000
di-n-octyl phthalate	ND	LT	ND	ND	ND	ND
diethyl phthalate	ND	ND	ND	ND	ND	840
benzo(a)anthracene	ND	520	ND	ND	800	800
benzo(a)pyrene	ND	ND	ND	ND	LT	ND
benzo(b)fluoranthene	ND	LT	ND	ND	LT	1000
benzo(k)fluoranthene	ND	LT	ND	ND	LT	1000
chrysene	ND	640	ND	ND	560	6400
anthracene	ND	ND	ND	ND	ND	400
benzo(ghi)perylene	ND	ND	ND	ND	ND	880
fluorene	ND	ND	ND	ND	ND	2000
phenanthrene	ND	ND	ND	ND	720	5200
dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND
indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND
pyrene	ND	LT	ND	ND	800	6800
aniline	51000	1700	ND	ND	ND	51000
4-chloroaniline	ND	980	ND	ND	ND	9800
dibenzofuran	ND	ND	ND	ND	ND	3000
2-methylnaphthalene	ND	ND	ND	ND	ND	10000
3-nitroaniline	ND	ND	ND	ND	ND	4800
benzene	ND	ND	ND	ND	ND	44000

µg/kg - Micrograms per kilogram

ND - Not Detected

LT - Present, but lower than the detection limit for low hazard analyses

**SAUGET Analytical Data
Site Q**

**SOIL SAMPLES
Organics (µg/kg)
Collected by Ecology & Environment, Inc. (7/83)**

Sample Number	B17B	B18A	B18B	BLANK 1	BLANK 2	Maximum
Sample Depth(ft)	24.0-26.0	22.0-24.0	24.0-26.0	NA	NA	Concentration
Organics						
chlorobenzene	4.1	ND	ND	ND	ND	100000
1,2-dichloroethane	ND	ND	ND	ND	ND	12000
1,1-dichloroethane	ND	ND	ND	ND	ND	19000
1,1,2,2-tetrachloroethane	ND	ND	ND	ND	ND	5700
1,2-trans-dichloroethane	ND	ND	ND	ND	ND	11000
ethylbenzene	7.7	ND	ND	ND	ND	790000
methylene chloride	6.1	19	47	LM	6.9	8700
tetrachloroethane	ND	ND	ND	ND	ND	12000
toluene	ND	ND	ND	ND	ND	2400000
trichloroethane	ND	ND	ND	ND	ND	55000
acetone	2000	ND	260	ND	ND	14000
2-butanone	ND	ND	ND	ND	ND	ND
4-methyl-2-pentanone	ND	ND	ND	ND	ND	250000
styrene	ND	ND	ND	ND	ND	64000
o-xylene	23	ND	ND	ND	ND	2300000
PCB-1242	ND	--	ND	ND	ND	ND
PCB-1254	ND	--	ND	ND	ND	360000
PCB-1248	ND	--	ND	ND	ND	70000
PCB-1260	160	--	2400	ND	260	16000000
PCB-1016	ND	--	ND	ND	ND	ND
Total PCB	NR	670	NR	NR	NR	1000000

µg/kg - Micrograms per kilogram.

ND - Not Detected

LM - Present, but lower than the detection limit for medium hazard analyses

NR - Total PCBs not reported.

-- Only PCB Total was reported

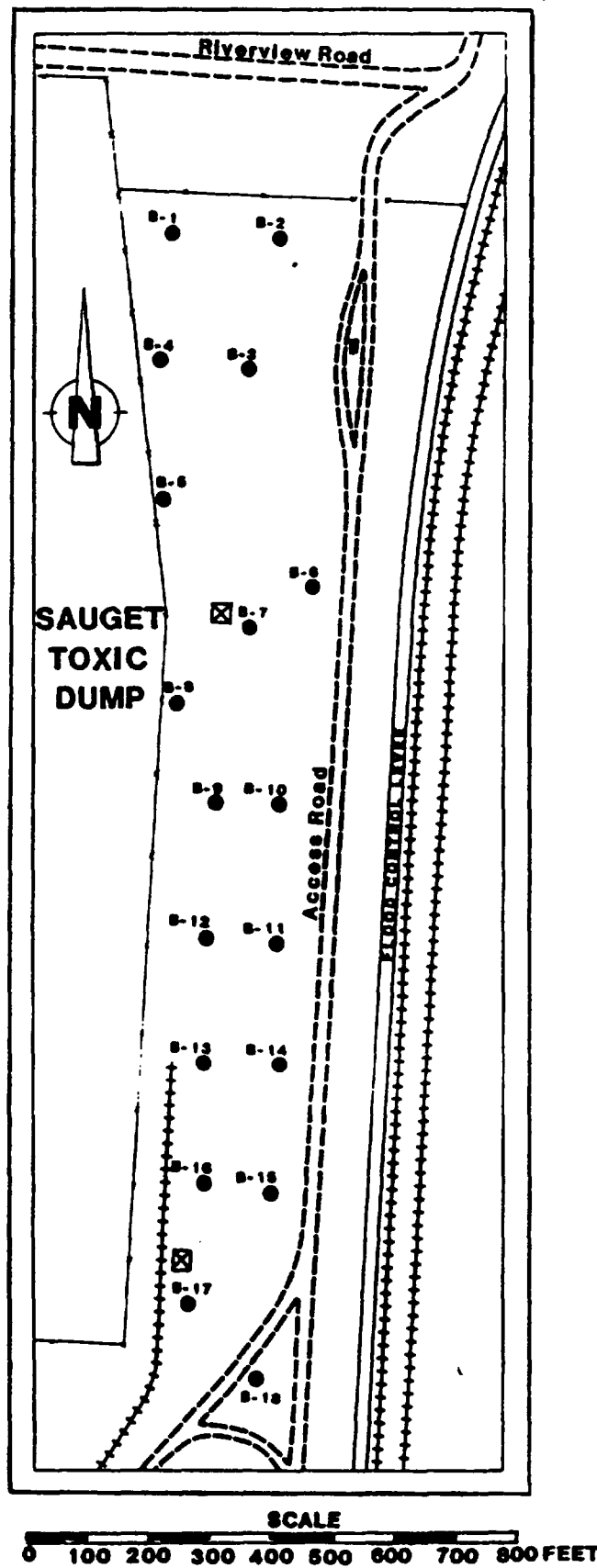


FIGURE Q-2
USEPA - FIT SUBSURFACE SOIL SAMPLING LOCATIONS AT SITE Q

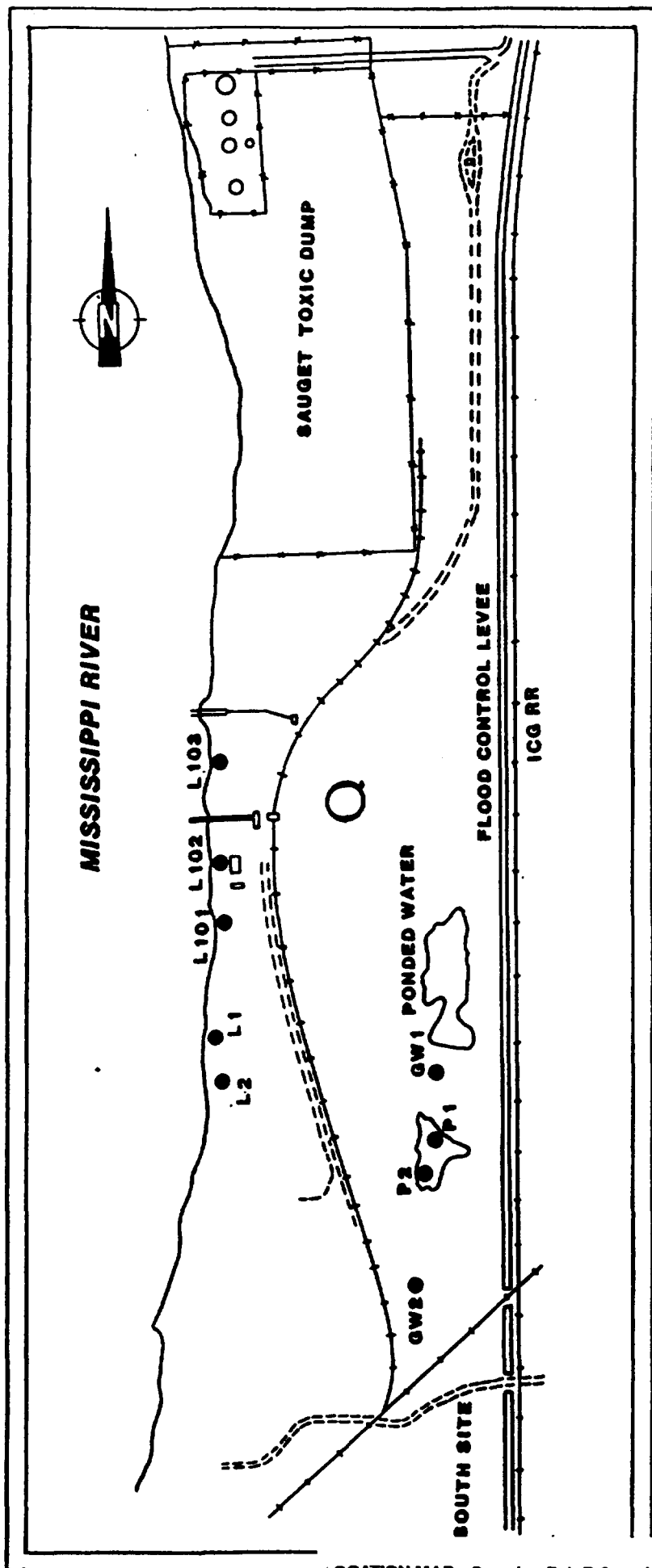
LOCATION MAP - Borings B-1 through B-18

**SAUGET Analytical Data
Site Q**

**SURFACE WATER, LEACHATE, GROUNDWATER SAMPLES
Total Metals and Misc.(mg/L unless otherwise noted)
Collected by IEPA**

Sample Number	P-1	L-1	GW-1	GW-2	P-2	P-3	Maximum
Sample Type	Pond water	Leachate	Groundwater	Groundwater	Pond water	Pond water	Concentration
Date Collected	10/17/72	10/17/72	1/17/73	1/17/73	4/10/73	4/26/73	Detected
Metals							
Calcium	80	56	310	137	250	280	310
Magnesium	8	26	57	205	42	44	205
Sodium	23	169	275	13	230	205	275
Potassium	6	30	10	4	85	70	85
Ammonia	0.19	21	NA	NA	32	36	36
Boron	7	6.5	NA	NA	2.6	2.8	7
Cadmium	ND	ND	0.02	ND	NA	0.02	0.02
Chromium (total)	ND	ND	ND	ND	NA	0.03	0.03
Copper	ND	0.01	ND	ND	0.02	ND	0.02
Iron	ND	46	ND	ND	60	67	67
Lead	ND	0.02	ND	ND	0.07	0.07	0.07
Manganese	ND	ND	ND	ND	6	6.5	6.5
Mercury (µg/L A28)	0.5	0.5	ND	ND	0.4	0.6	0.6
Nickel	ND	ND	ND	ND	0.3	0.2	0.3
Silver	ND	ND	0.01	ND	ND	ND	0.01
Zinc	ND	0.2	ND	0.1	4.2	5	5
Alkalinity	46	810	645	375	420	ND	810
Chloride	19	4	310	24	210	205	310
Nitrate	NA	NA	NA	NA	NA	ND	ND
Phosphate	NA	NA	NA	NA	3.7	5	5
Sulfate	230	18	325	25	350	270	350
Hardness	240	560	NA	NA	970	930	970
Phenols	NA	NA	0.02	ND	NA	NA	0.02

mg/L - Milligrams per liter.
NA - Parameter not analyzed.
ND - Not detected.
µg/L - Micrograms per liter.



- LEGEND
- GW1 IEPA GROUNDWATER SAMPLING LOCATION
 - P1 IEPA SURFACE WATER SAMPLING LOCATION
 - L1 IEPA LEACHATE SAMPLING LOCATION

FIGURE Q-1
DEAD CREEK SITE AREA Q WITH SAMPLING LOCATIONS

LOCATION MAP - Samples P-1, P-2, and P-3

recycled paper

ecology and environment

Source: "Description of Current Situation at the Dead Creek Project Sites", E&E, 1986

**SAUGET Analytical Data
Site Q**

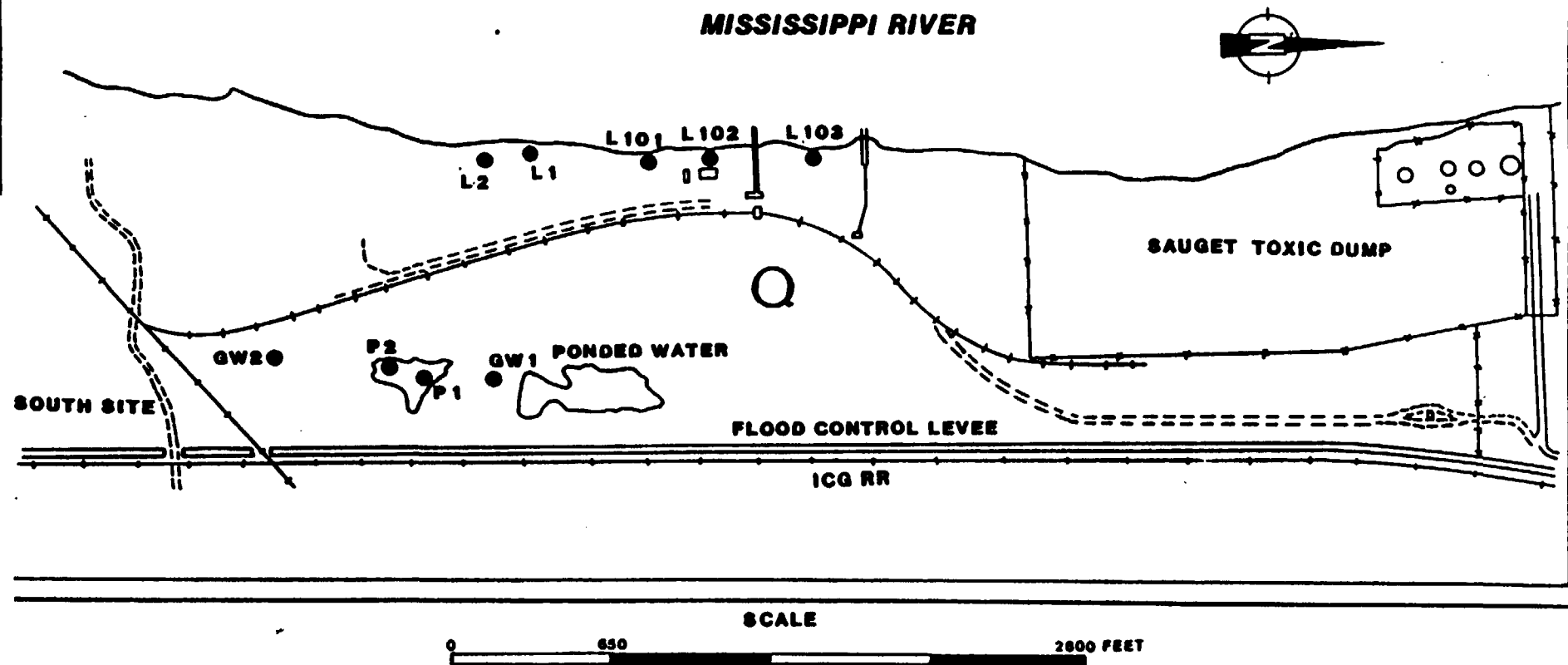
**LEACHATE SAMPLES
Total Metals, PCB and Misc.(mg/L unless otherwise noted)
Collected by IEPA**

	Sample Number	L-1	L-2	L101	L012	L103	Maximum
	Date Collected	10/28/81	10/28/81	9/29/83	9/29/83	9/29/83	Concentration
Metals, PCB and Misc.							Detected
Alkalinity		255	293	191	158	242	293
Ammonia		3.8	2.8	6.5	4	3.7	6.5
Arsenic		0.057	0.022	0.11	0.034	0.012	0.11
Barium		0.8	0.2	0.5	0.4	0.3	0.8
Boron		5.8	5.6	37.5	42	23	42
Cadmium		ND	ND	ND	ND	ND	ND
COD		445	35	87	94	71	445
Chloride		15	17	23	22	31	31
Chromium (total)		0.08	ND	0.03	0.01	ND	0.08
Copper		0.2	0.04	1.2	0.06	ND	1.2
Cyanide		ND	ND	ND	0.01	0.01	0.01
Hardness		1330	1220	1225	1360	1045	1360
Iron		207	17.5	86	36	6.4	207
Lead		0.26	ND	0.13	0.08	0.02	0.26
Magnesium		145	67	81	73	44.5	145
Manganese		7.7	34	6.7	6.8	2.7	34
Mercury		ND	ND	ND	ND	ND	ND
Nickel		0.3	ND	0.1	0.1	ND	0.3
Nitrate		0.24	0.4	0.21	6.1	1.8	6.1
Phosphorus		6.1	0.74	3.1	1.3	0.86	6.1
Potassium		16.5	9.5	13.4	13.5	17	17
R.O.E.		1980	1829	1880	2118	1563	2118
Silver		0.02	0.01	0.01	ND	ND	0.02
Sodium		55.7	53.3	56	70	51	70
Sulfate		1196	1059	1200	1350	900	1350
Zinc		1.2	0.2	0.3	0.2	ND	1.2
Phenol		0.005	0.005	ND	ND	ND	0.005
PCBs (µg/L)		0.7	1	0.5	ND	0.1	1
2,3-D (µg/L)		ND	ND	ND	ND	ND	ND

mg/L - Milligrams per liter.

ND - Not detected.

µg/L - Micrograms per liter.



LEGEND

- GW1 IEPA GROUNDWATER SAMPLING LOCATION
- P1 IEPA SURFACE WATER SAMPLING LOCATION
- L1 IEPA LEACHATE SAMPLING LOCATION

FIGURE Q-1
DEAD CREEK SITE AREA Q WITH SAMPLING LOCATIONS

**SAUGET Analytical Data
Site Q**

**SOIL/SEDIMENT SAMPLES
Metals (mg/kg)
Collected by START (1997)**

Sample Number	Q201	Q202	Q203	Q204	Q205	Q206	Q207	Q208	Maximum
Metal									Concentration
Arsenic	6.9	9.4	4.7	32.0	4.8	3.4	7.3	0.19	32
Barium	191	232	135	969	128	70.6	169	416	969
Cadmium	0.15	4.4	1.2	20.8	5.0	3.1	0.67	130	130
Chromium (total)	10.3	15.9	11.0	125	304	13.3	17.4	3900	3900
Lead	28.7	92.4	128	2450	102	139	47.8	2300	2450
Mercury	0.18	1.6	0.08	0.42	0.15	0.28	0.16	12.2	12.2
Selenium	1.0	1.9	1.1	0.62	1.3	0.76	1.4	8.1	8.1
Silver	0.36	0.71	1.4	18.7	0.40	0.37	0.32	0.80	18.7

mg/kg - Milligrams per kilogram.

**SAUGET Analytical Data
Site Q**

**SOIL/SEDIMENT SAMPLES
PCB (mg/kg)
Collected by START (1997)**

	Sample Number	Q201	Q202	Q203	Q204	Q205	Q206	Q207	Q208	Maximum
PCB										Concentration
1254		0.72	1.7	0.88	1.8	0.034	4.2	1.6	ND	4.2
1248		0.48	1.6	ND	0.92	ND	2.6	ND	120	120
1260		0.61	0.76	0.11	1.1	0.028	1.9	1.8	ND	1.9

mg/kg - Milligrams per kilogram.

ND - Not detected.